



Together We Can Change
National Markets

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Rachel Schmeltz
ENERGY STAR Product Manager
c/o Rebecca Duff, ICF International
Environmental Protection Agency
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1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Ms. Schmeltz:

On behalf of CEE, I would like to thank EPA for the opportunity to provide comments on the final draft proposal to revise the ENERGY STAR Roof Products Specification (Specification). The comments and recommendations below represent the consensus position of the CEE Residential and Commercial HVAC Committees (Committees). Organizations listed at the end of this letter have indicated their individual support of the comments.

Comments and Recommendations

Program Integrity & Third-Party Performance Data

We believe that the practice of allowing manufacturers to self-test and self-report the cool roof product parameters should be discontinued in an orderly, deliberate and systematic manner which minimizes disruption to the program.

The public interest is best served—and the public trust in ENERGY STAR best preserved—when the data relied upon and presented to EPA comes from disinterested third parties governed by open, transparent and objective processes. We recognize that historically there have been legitimate reasons (e.g., cost, burden on manufacturers, and concern over program participation) why relying on third-party data wasn't practical. Today, that is no longer the case. Third-party data should not result in a higher cost to manufacturers or decrease the ease and speed of data reporting (see below).

In light of the fact that the new ENERGY STAR specification will (1) require testing and reporting of all products for thermal emittance and (2) will no longer allow “aged” solar reflectance values to come from “washed” samples, using the Cool Roof Rating Council's *Product Rating Program* (or equivalent) would impose little additional burden. We recognize that each manufacturer has its own cost structures, constraints, and other unique considerations with respect to product testing, but do not believe self-reporting of product performance parameters will always be faster and less expensive than existing third-party alternatives. **For new products not yet rated (either by ENERGY STAR or the CRRC), third-party testing is likely to be both faster and less costly than self-testing and reporting for many manufacturers.** The field measurements proposed by ENERGY STAR are logistically more complex and time-consuming than what is required by the CRRC program. The rating process under the CRRC program requires lab preparation of samples that are then submitted to the manufacturer's chosen (CRRC-accredited) test lab that then performs measurements and takes responsibility for sending the samples to the CRRC-accredited exposure farm. The proposed ENERGY STAR requirements are logistically just as difficult if not more so.



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For *existing* ENERGY STAR products that also have third-party ratings, ENERGY STAR should require that only third-party ratings be used after a reasonable amount of lead time.

For existing ENERGY STAR products that do not have third-party ratings, now is the time to require migration toward the third-party CRRC program (or equivalent). Since all ENERGY STAR products are now proposed to be tested for thermal emittance, and since a number of products have been rated as “washed” samples and may no longer be permitted to be listed as such, ENERGY STAR participants will need to make additional measurements of their products, and little additional burden will be imposed on participants to use third-party ratings.

Single Performance Metric to Describe “Coolness”

CEE supports EPA’s intention to allow use of the Solar Reflectance Index (SRI) as an alternative method of qualification to the extent it will: A) reduce confusion in the marketplace and B) offer manufacturers increased flexibility in optimizing roof products to be “cool.” A single performance metric has the ability to serve as a credible and consistent basis for comparing the “coolness” of a roof product. In order to be effective, EPA must develop a specific process for calculating SRI and explicitly state all assumed values that must be used (e.g. wind speed, insolation, and ambient temperature). Further, manufacturers should have the option to use this method for all products, not just those with low emittance. Lastly, EPA should continue to collect and publish Solar Reflectance data and begin to collect Thermal Emittance data, both of which may be used to calculate heat flow rates, energy savings, and peak demand reduction.

Maintenance of Thermal Reflectance Requirement for Steep-Slope Products

On the current list (7/24/2006) of ENERGY STAR roof products for steep slopes, only three have a *Solar Reflectance after Three Years* less than 0.23, which would suggest the proposed requirement of 0.15 is set unnecessarily low. EPA should provide justification for the proposed requirement, or set a higher value that better represents the expected *Thermal Reflectance Value after Three years*.

Administrative Recommendations

Formula for SRI in the Specification

The formula for calculating SRI in the proposed specification doesn’t include definitions of T_b and T_w . If EPA chooses to allow SRI as an alternative method, the complete formula should be included in the final specification.

Please contact CEE Residential Program Manager John Taylor at (617) 589-3949 ext. 228 with any questions about these comments. Thank you again for the opportunity to comment on the ENERGY STAR Roof Products Specification.

Sincerely,

Marc Hoffman
Executive Director



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Participating Organizations

Austin Energy

California Energy Commission

Long Island Power Authority

Pacific Gas and Electric

TXU Electric Delivery